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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,389	06/19/2001	Erwin Herre	31728-170464	1323

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EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
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2613

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DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,389

Applicant(s)

HERRE, ERWIN

Examiner

Andy S. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cochran et al., (US Patent 5,172,005 hereinafter referred to as "Cochran").

Cochran discloses a conveying system (Cochran: figure 1), comprising: a conveyor for advancing items thereon (Cochran: column 6, lines 15-21); an image capturing apparatus for detecting individual items on the conveyor and for generating image signals representing an image of the items; the apparatus including an illuminating unit including a matrix composed of a plurality of LEDs (Cochran: column 5, lines 40-45); a picture capturing unit for receiving light rays emitted by said matrix and modified by an item situated in a path of the light rays and for generating the image signals (Cochran: column 6, lines 45-60); and a control unit connected to the matrix and said picture capturing unit for a pulsed illumination of said matrix (Cochran: column 7, lines 15-30), as in claim 1.

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Regarding claim 2, Cochran discloses a means for synchronizing the pulsed illumination of said matrix (Cochran: column 6, lines 63-67; column 7, lines 1-4), as specified.

Regarding claim 3, Cochran discloses that the LEDs are monochromatic (Cochran: column 3, lines 55-67; column 4, lines 1-10), as in the claim.

Regarding claim 4, Cochran discloses that the matrix is positioned above the conveyor (Cochran: column 5, lines 40-54), as in the claim.

Regarding claim 5, Cochran discloses that the matrix is positioned below the conveyor (Cochran: column 5, lines 60-67), as in the claim.

Regarding claims 6-9, Cochran discloses that the picture capturing unit and the matrix are disposed above the conveyor (Cochran: figure 1, elements 20 and 46 disposed above element 38), as in the claims.

Cochran discloses a conveying system (Cochran: figure 1), comprising: a conveyor for advancing items thereon (Cochran: column 6, lines 15-21); an image capturing apparatus for detecting individual items on the conveyor and for generating image signals representing an image of the items (Cochran: column 6, lines 45-60); the apparatus including an illuminating unit (Cochran: column 3, lines 50-55) including a first matrix composed of a plurality of LEDs and disposed above said conveyor (Cochran: column 5, lines 40-45); a second matrix composed of a plurality of LEDs and disposed below said conveyor (Cochran: column 5, lines 60-67); a picture capturing unit disposed above said for receiving light rays emitted by said first and second matrices in reflected and transmitted light, respectively, and modified by an item by an item situated in a path of the light rays and for generating the image signals (Cochran: column 7, lines 10-20); and a control unit connected to the first and second matrices and said picture

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capturing unit for a pulsed illumination (Cochran: column 6, lines 63-67; column 7, lines 1-4) of said first and second matrices and for synchronizing the pulsed illumination of said first and second matrices with actuation of said picture-capturing unit for individually capturing image of the items (Cochran: column 8, lines 30-55), as in claim 10.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cochran discloses a video inspection system employing multiple spectrum LEDs illumination. Liptay-Wagner a photodetector array based optical measurement system. Mills discloses an apparatus and method for processing fruit and the like. Owen discloses a microvia inspection system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao
Primary Examiner
Art Unit 2613

ANDY RAO
PRIMARY EXAMINER



asr

April 30, 2004